

IN THE SPECIFICATION:

*On page 1, prior to line 5, please insert the following headings and paragraph:*

--Cross Reference to Related Applications

This application is for entry into the U.S. national phase under §371 for International Application No. PCT/FI03/00243 having an international filing date of March 28, 2003, and from which priority is claimed under all applicable sections of Title 35 of the United States Code including, but not limited to, Sections 120, 363 and 365(c), and which in turn claims priority under 35 USC §119 to Finnish Patent Application No. 20020614 filed on March 28, 2002.

Technical Field--

*On page 1, prior to line 13, please insert the following heading:*

--Background of the Invention--

*On page 1, prior to line 29, please insert the following heading:*

--Summary of the Invention--

*On page 1, please amend the paragraph beginning at line 29 as follows:*

--Despite [[of]] the ongoing serious efforts of large groups of research workers around the world, it is apparent that an ultimately versatile personal telecommunication device remains to be seen. It is thus an objective of the present invention to provide a system level design for a personal telecommunication device that would enhance versatility regarding both functionality and potential for personalization. It is another objective of the present invention to enhance the potential of a personal telecommunication device as means for self-expression.--

*On page 3, prior to line 29, please insert the following heading:*

*--Brief Description of the Drawings--*

*On page 4, prior to line 22, please insert the following heading:*

*--Detailed Description--*

*On page 4, please amend the paragraph beginning at line 32 as follows:*

--Fig. 1 illustrates a personal telecommunication device 100 according to an embodiment of the present invention. The personal telecommunication device 100 comprises two separate parts, namely the amulet 101 and the keypad part 102. The most prominent feature of the amulet 101 is a display 103 that is adapted to display graphics, images and alphanumeric characters. Another important feature of the amulet 101 is a hanging arrangement 104 with the help of which the amulet 101 is adapted to be worn on the torso of a user of the personal telecommunication device 100. In fig. [[104]] 1 the hanging arrangement 104 appears in the exemplary form of a string, but it could also have the appearance of a needle, a safety pin, a velcro patch or any other means known e.g. from the field of attaching jewellery onto a person's torso. Within the context of this description the amulet 101 together with its hanging arrangement 104 are meant to externally appear as a necklace, a pendant or a brooch. The most prominent feature of the keypad part 102 is a keypad 105 that consists of pressable or otherwise actuatable keys. There is a communications link 106 between the amulet 101 and the keypad part. Most advantageously the communications link 106 is bidirectional, but embodiments of the invention can be realised even with a unidirectional communications link the transmission direction of which is from the keypad part 102 to the amulet 101.--

*On page 5, please amend the paragraph beginning at line 31 as follows:*

--An important division can be made between so-called "amulet engine" embodiments and "keypad part engine" embodiments of the invention. In the framework of personal telecommunication devices as they are known at the priority date of this description, the concept of engine is understood to encompass the intelligence and network communication functions of the device. In other words the engine concept includes the main processor that effects and controls the operation of the device, the memory that the processor uses for accomplishing its tasks, as well as the signal processor and radio transceiver that the main processor uses for communicating with the fixed parts of cellular radio systems. We will first discuss "keypad part engine" embodiments, where the engine is located within the keypad part.--

*On page 6, please amend the paragraph beginning at line 4 as follows:*

--Placing the engine into the keypad part has certain advantages at least when the level of technology known at the priority date of this description is taken into account. The generation of radio transmissions towards the base stations of cellular radio systems is easily the most power-hungry application in known personal telecommunication device, which means that the radio transceiver should be located in that part of the personal telecommunication device that includes the largest battery, which is typically the keypad part because less stringent size and weight requirements apply to it than to the amulet. The amulet is also adapted to be worn directly against the body of the user, which means that if the amulet was to exchange radio transmissions with base stations, substantial loss of otherwise useful radiation energy could occur through absorption to the user's body. The keypad part is more likely to be in a pocket or a bag or on a tabletop, with correspondingly less ~~absorption~~ absorption of radiation to the user's body. On the other hand the interplay between the radio transceiver and the main processor is quite intimate, which tends to discourage a system designer from separating the parts of the engine from each other.--

*On page 7, please amend the paragraph beginning at line 19 as follows:*

--Although the amulet 201 of figs. 2a and 2b is a very simple one compared with amulets according to certain other embodiments of the invention, it has certain important advantages. The fact that the amulet only needs to receive and never needs to transmit makes it easy to keep the overall power consumption of the amulet very low. Despite [[of]] its simplicity, the amulet 201 manages to offer remarkable potential for self-expression, because the display will be always visible at the upper front part of the user's torso. The amulet 201 is always readily available for its user to check, whether new messages have arrived or whether there is something else in the status of the personal telecommunication device that would require the user to fetch the keypad part 202 into reach. The amulet 201 may also take on the functions of a personal watch, simply by making the display 233 constantly show the time.--

*On page 7, please amend the paragraph beginning at line 31 as follows:*

--For the reasons of pronounced potential for self-expression as well as easy checking of time and phone status, one could even consider producing amulets of the kind shown in fig. 2 to be used as an accessory to otherwise complete mobile telephones. If we assume that a mobile telephone supports Bluetooth or some other convenient short distance communication protocol, making use of an "add-on" amulet would only require programming the mobile telephone so that it transmits all information that goes into its own display driver (or a suitable selected part thereof) also to an amulet through the Bluetooth connection.--

*On page 14, please amend the paragraph beginning at line 11 as follows:*

--Fig. 11 shows how the amulet may communicate with other devices [[than]] in addition to the keypad part. The other device may have a receptive socket into which the amulet 101 is plugged; an example of this kind is the play console 1101 in fig. 11 with a socket 1102 at its central part. A plug-in coupling makes the use of galvanic connectors very convenient, so we assume that the amulet 101 and the receptive socket 1102 comprise a mutually matching pair of connectors (not specifically shown in fig. 11). Assuming that the amulet

101 comprises a short distance transceiver for communicating wirelessly with the keypad part, the amulet 101 may also set up wireless connections with other devices that are within the range of the short distance transceiver and that comprise a matching short distance wireless transceiver. As an example, fig. 11 shows how the amulet may communicate with the on-board computer 1103 of the user's car. The other device may also have a simple mechanical holder 1104 for the amulet; here the other device is the handle bar 1105 of an exercise bike. If the exercise bike is computer-controlled, it might make sense to make an amulet placed in the mechanical holder 1104 to communicate with the control computer. Otherwise the mechanical holder just helps the user to enjoy music from the amulet's FM receiver or use the amulet in some other independent way during exercise.--